

REMARKS/ARGUMENTS

The claims are 3-5 and 7-15. Claim 15 has been amended to specify that the end piston head is moveable along the entire pump body length between the pump body distal end and the pump body proximal end. In addition, claim 5 has been amended to depend on claim 4 and to remove a reference number. Support for the claims may be found, *inter alia*, in the disclosure at FIGS. 1, 2, and 4. These claim amendments would materially reduce or simplify the issues for appeal and are believed not to raise new issues that would require further consideration and/or search. Accordingly, it is respectfully requested that the claim amendments be entered and reconsideration of all the claims is expressly requested.

Claim 5 was rejected under 35 U.S.C. §112, second paragraph, as lacking antecedent basis for the recitation "rigidly bent shape." In response, Applicants have amended claim 5, *inter alia*, to depend on claim 4, which it is respectfully submitted overcomes the Examiner's rejection under 35 U.S.C. §112, second paragraph.

Claims 3-5, 7, and 14 (and presumably claim 15) were rejected under 35 U.S.C. §102(b) as being anticipated by Schmitz U.S. Patent No. 3,724,076. The remaining claims were rejected under 35 U.S.C. §103(a) as being unpatentable over Schmitz in

view of *Fischione* U.S. Patent No. 4,655,749 alone (claim 8), or further in view of *Century* U.S. Patent No. 5,513,630 (claims 9-10 and 13) or *Baldwin et al.* U.S. Patent No. 5,238,003 (claims 11-12).

This rejection is respectfully traversed.

As set forth in claim 15 as amended, Applicants' invention provides an injection pump including a pump body, a pump body grip, and a piston system having a rigid first piston rod, a flexible second piston rod, and an end piston head. The end piston head is movable along the entire length of the pump body between the distal end of the pump body and the proximal end of the pump body. The piston of Applicants' injection pump as recited in claim 15 as amended can travel the entire length of pump body or tube 3 because the rigid piston rod and the flexible piston rod can be retracted until the piston abuts the grip part of the instrument.

In Applicants' Amendment filed January 28, 2009, the differences between Applicants' end piston head as recited in claim 15 and *Schmitz* were explained in detail; however, the Examiner apparently interpreted the recitation in claim 15 "wherein said end piston head is movable along the pump body between the pump body distal end and the pump body proximal end" to require only that the piston can travel some length of the

pump body between the pump body proximal end and the pump body distal end.

In response, Applicants have amended claim 15 to express the ability of the end piston head to travel the entire length of the pump body. With Applicants' injection pump as recited in claim 15 as amended, the rigid piston rod and the flexible piston rod can be retracted until the piston abuts the grip part of the instrument, which is not possible with the *Schmitz'* device.

The remaining references cited by the Examiner have been considered but are believed to be no more pertinent. None of these cited references discloses or suggests an injection pump for application of highly viscous media wherein the end piston head is movable along the entire pump body length between a pump body distal end and a pump body proximal end.

Accordingly, it is respectfully submitted that claim 15 as amended, together with claims 3-5 and 7-14 which depend directly or indirectly thereon, recite patentable and unobvious subject matter.

In summary, claims 5 and 15 have been amended. In view of the foregoing, withdrawal of the final action and allowance of this application are respectfully requested.

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: MAIL STOP: AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 16, 2009.

Amy Klein

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